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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,383	04/05/2007	Erich Muller	THP 0001 PA	2550
23368 7590 11/05/2009 DINSMORE & SHOHL LLP ONE DAYTON CENTRE, ONE SOUTH MAIN STREET SUITE 1300 DAYTON, OH 45402-2023				
EXAMINER OLSZEWSKI, JOHN				
ART UNIT 3618		PAPER NUMBER		
MAIL DATE 11/05/2009		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/585,383

**Applicant(s)**

MULLER ET AL.

**Examiner**

JOHN R. OLSZEWSKI

**Art Unit**

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-11, 13, 15 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 12, 14 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. **The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims.** Therefore, the drive servomotors, power supply, control electronics, and the encoder must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.** Specifically, applicant claims "the hinge joint" which has been previously established as "a hinge".
3. **Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.** Specifically, in the second to last line of the claim applicant writes "pulley each attached" this is confusing and difficult to understand, making the claim indefinite.
4. **Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.** Specifically, applicant writes "a hinge" after a hinge has been previously established so it is unclear if applicant is attempting to establish a second hinge.
5. **Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.** Specifically, applicant writes

"therein the manner of a telescope" which is confusing and difficult to understand, making the claim indefinite.

6. **Claim 11 recites the limitation "the folded-in" in the last line of the claim, previously established as "folded up".** There is insufficient antecedent basis for this limitation in the claim.

7. **Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.** Specifically, applicant writes "mounted in at least two positions rotated by 180" which is confusing and difficult to understand making the claim indefinite.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 1-3, 6-7, 13, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Cassoni (US 6,715,774).**

**[Claim 1]** A small vehicle, with a body (3) and at least two wheels (31) each connected to the body via first and second stub axles (7) attached to the body via a hinge (17 and axis A, conglomeration of brackets forming a hinge with two main pivoting areas), wherein the stub axles (7) are pivotable in a first position (Figure 2) in which they are folded up against the body (Figure 2) and a second position (Figure 3) in which the stub axles (7) extend out from the body in a traveling position (Figure 3) wherein at least one spring (11) is provided which engages on one side at the body (3, Figure 11) and on the other at the stub axles (7) via said hinge (connected to element 17 on the body and

element 77 on the stub axle; the stub legs pivot about hinge shown by label in Figure 2-6) and by its spring force alone holds the traveling position of the stub axles without additional radial reinforcements and stays; **[claims 2 and 3]** A small vehicle according to claim 1 wherein the spring is secured to the body (17) at one end and engages the stub axles with the other end (77); **[claim 6]** A small vehicle according to claim 1, wherein the spring engages at a section of the stub axles, projecting beyond the hinge joint as seen from the wheel of the stub axles (Figures 2-9); **[claim 7]** A small vehicle according to claim 1, wherein a mechanical stop (43) is provided in the hinge between the body and stub axles which, in addition to the spring, limits a traveling position unfolded to the maximum of the stub axles; **[claim 13]** A small vehicle according to claim 1, wherein each of the stub axles is pretensioned by an additional spring (27) in the direction of the folded-in position; **[claim 17]** A small vehicle according to claim 1, wherein the wheels are removably attached to the stub axles via a quick-release coupling (31; wheels are removable and in a broad sense anything can be a "quick release coupling", such as a nut and bolt or threaded axle and nut, etc..).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cassoni (US 6,715,774) as applied to claim 1 above, and further in view of Allen (US 2,406,183).**

**[claim 9]** A small vehicle according to claim 1, wherein the body consists of two substantially parallel pipes rigidly connected to each other, each of which is connected in their lower area via a hinge to one of the stub axles (Cassoni fails to disclose a body composed of two parallel pipes rigidly connected to each other, however, Allen teaches two parallel pipes (10 and 11) rigidly (12) held to one another. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Allen into the invention of Cassoni in order to provide a more easily constructed frame.).

**10. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cassoni (US 6,715,774) as applied to claim 1 above, and further in view of Chiang (US 6,443,543).**

**[claim 18]** A small vehicle according to claim 1, wherein each of the wheels has its own drive motor (Chiang, 62) with an individual power supply (Chiang, 34) and individual

control electronics (Chiang, 68 and 120) (Cassoni fails to disclose motorized wheels, however, Chiang discloses a movable cart which makes use of movable wheels which are provided with drive motors and a power supply and control electronics. Therefore it would have been obvious to incorporate the teachings of Chiang into the invention of Cassoni in order to provide an easier way to transport the cart.); **[claim 19]** A small vehicle according to claim 18, wherein the motors are servomotors (Chiang, 62) and have an encoder (Chiang, 68 and 120) for determining and setting their rotation speed (Cassoni fails to disclose motorized wheels, however, Chiang discloses a movable cart which makes use of movable wheels which are provided with drive motors and a power supply and control electronics. Therefore it would have been obvious to incorporate the teachings of Chiang into the invention of Cassoni in order to provide an easier way to transport the cart.).

***Allowable Subject Matter***

**11. Claims 4-5, 8, 10-12, and 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

**With regards to claim 4:**

- The subject matter found in claim 4 that has not been found to have been taught or disclosed in the prior art found at this time is wherein at least either the body or one or both stub axles have, at their sections adjoining the hinge, a hollow section, in which the spring is housed. Therefore claim 4 and any claims that depend therefrom are found to contain allowable subject matter.



With regards to claims 5 and 8:

- The subject matter found in claim 5 that has not been found to have been taught or disclosed in the prior art found at this time is wherein the spring is a gas-pressure spring which can be locked at least in the traveling position of the stub axles. Therefore claim 5 and any claims that depend therefrom are found to contain allowable subject matter.

With regards to claims 10, 12, and 15-16:

- The subject matter found in claim 10 that has not been found to have been taught or disclosed in the prior art found at this time is wherein there is arranged between the two outer pipes of the body a third pipe which serves as a guide pipe for a steering rod. Therefore claim 10 and any claims that depend therefrom are found to contain allowable subject matter.

With regards to claim 11:

- The subject matter found in claim 11 that has not been found to have been taught or disclosed in the prior art found at this time is wherein each of the two outer pipes has in its lower area a recess to house the folded-in stub axles. Therefore claim 11 and any claims that depend therefrom are found to contain allowable subject matter.

With regards to claim 14:

- The subject matter found in claim 14 that has not been found to have been taught or disclosed in the prior art found at this time is wherein the additional spring acts on the hinge section of the stub axles via a Bowden wire and a guide

roll. Therefore claim 14 and any claims that depend therefrom are found to contain allowable subject matter.

***Response to Arguments***

12. **Applicant's arguments filed on the 14<sup>th</sup> of August, 2009 have been fully considered but they are not persuasive.** In response to applicant's argument that the references fail to show the stub axles folded up against the body, examiner holds that the applied reference still reads on this claim language because of the vagueness of "folded up against", there is no explicit recitation of direct physical engagement or contact between the two at this point in the claims.

***Conclusion***

13. **The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:**

- Wenzel (US 4,614,349) and Story (US 3,663,033)
  - Disclose structure similar to that claimed and disclosed by applicant

14. **Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN R. OLSZEWSKI whose telephone number is (571)272-2706.** The examiner can normally be reached on M-Th 5:30AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-7742. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. R. O./  
Examiner, Art Unit 3618

10/26/2009

/Paul N. Dickson/  
Supervisory Patent Examiner, Art Unit 3616